Report of the Chief Engineer of the City of Astoria, Oregon Fire Department for 1912.

Compliments of

C. E. FOSTER

Chief Engineer of Department

REPORT OF THE CHIEF ENGINEER OF THE CITY OF ASTORIA, ORE., FIRE DEPARTMENT, 1912

To the Honorable Committee on Fire and Water ExOfficio Fire Commission.

Gentlemen:—I herewith submit my annual report of the fire department for the year 1912.

During the year the department responded to 108 alarms.

The total loss from fire in the city during the year was	$ 22720.00
Insurance paid on the same	15200.00
Making the loss over insurance paid	7520.00
An average loss per fire of	210.37
An average loss over the amount of insurance of	69.63

The principal fires of the year were the Schoenbaechler Cigar factory. W. N. Ford's residence. Lebeck flats. C. Larson's residence these four fires brought losses of over ..... $ 20000.00

The department responded to two alarms outside of the City limits during the year. On March 4th we received a call for help from the Hammond Mills; one steam fire engine and two combination wagons, were sent. On May 13th we received a call for help from the City of Seaside; one steam fire engine and two hose carts were sent, with a crew of men.

There was one death from fire during the year, it being a Mr. Eisler, in a fire at 185 Ninth street.

The alarms were as follows: Box 25 telephone 75, still 8.

Number of alarms transmitted from headquarters to other houses 31.

In months the alarms were as follows: Jan. 5, Feb. 4, March 14, April 13, May 15, June 7, July 5, Aug. 8, Sept. 9, Oct. 10, Nov. 3 Dec. 15.

The following boxes were used for alarms during the year:

Box	6	7	12	14	15	16	17	18	32	33
Times used	3	2	3	2	1	2	2	6	3	4

The following numbers were sent out from headquarters through the transmission box, and the times sent:

5	7	8	9	12	14	16	17	18	23	27	31	35	44	Phone
3	2	1	1	1	1	1	4	1	1	3	1	1	1	10

Fires were as follows; burning flues, 47, overheated stove 2, roof from sparks 13, overheated pipe 1, gasoline boat 3, brush 5, pitch pot 1, auto 1, from sparks 4, smoke house 1, rubbish 2, street fires 4, from defective flues 4, fire crackers 1, cigarettes 1, electric flat iron 2, from locomotive 1, band saw belt 1, from furnace 1, hot ashes 1, from stoves 2, from gas stove 1, unknown 5, false 4. These four false alarms were not wilful, but were by people that thought there was a fire in each case.

Fires were extinguished by the department as follows: Chemical 48, hydrant streams and Chemicals 9, hydrant streams 9, with buckets 8.

Number of feet of hose laid at fires	12500 feet
Number of gallons of chemical used	1100 gal.

Following is a detailed report of all expenses of the department for the year:

Salaries.		
Chief Engineer, ten permanent men and nineteen call men.....$		14598.60
Horse Supplies.		
32000 lbs. of Hay at 19.75 .....$	316.00	
17000 lbs. of Oats at 28.50	242.25	
28000 lbs. of Straw, at 8.90	124.60	
1500 lbs. of Bran, at 23.50	17.62	
10 sacks of Carrotts	9.00	$709.47
Horse shoeing	153.40	
Veterinary services	9.25	
Medicine	9.40	
Feed box hangers	2.20	
Spring on stall door	.30	
Six sponges	3.00	
Two whips and one whip socket	3.90	
Saddle and breeching, single harness	14.00	
Two hold-back straps & trace holders	75	
One sweat pad	.75	
One corn brush	.85	
One and half dozen small snaps	1.30	
Repairs to harness	6.15	205.25
New Apparatus.		
One auto combination hose and cnemical	5500.00	
One auto chassis for hose 3 wagon, including transfer of bed, freight, siren & chains	3208.00	
One two engine heater, ...	260.00	
Two Hale hydraulic auto jacks	191.37	
Two 5 inch hydrant Ys, with gate valves	70.00	
Five spanners for hydrant Ys	3.00	
Two shut off nozzles	40.00	
Two dozen respirators	45.00	
Two and one third dozen smoke goggles	42.00	
Two oil pans and soda can for auto	7.25	
Six claw bars	7.50	$9374.12
Maintainance of apparatus.		
One coil of rope	14.43	
Recharging auto batteries	13.00	
Rubber plastic and cement for tires	1.75	
One can cup greese, 2 cans transmission greese	2.65	
Two presto light tanks	4.50	
259 1-2 gallons of gasoline	45.30	
21 gallons of auto engine oil	15.85	
Six straps for hydrant wrenches	3.50	
One dozen chamois skins	16.80	
25 pounds of wiping waste	3.50	
Ten sponges	4.25	
One 5 gallon gasoline can & one engine oil can	2.10	
One oil cup, ...	.90	
One coal oil feed can	.50	
One strap and ring	.25	
One set of location lead and lines	.80	
Bolts for gates and nozzle holders	1.03	
Five lbs axle grease	.75	
One sheet iron for mud guard	1.08	
Hinges and brass for respirator boxes	2.78	
Eight small cans paint	5.65	
One canvas cover for auto	5.50	

Seven auto wreches, one tire pliers	5.05	
One door trip, line holder, and two ladder hooks	5.25	
One hat rack on auto	4.25	176.72

REPAIRS TO APPARATUS

King-bolt and repairing seat rail single wagon	2.00	
Repairing standard, steering wheel, brake rod, axle and Tongue, Truck	6.75	
Repairing stay chain, spring ladder, holder, hose 1 wagon	6.65	
New fellow, setting tire and tongue ring, Hose 4	3.65	
Repairing gear wheel of speedometer connection and-grinding valve stems and valves Hose 2	12.25	
Soldering oil pipe and repairing steering rod knuckle, Hose 3	2.00	36.30

Chemical Supplies.

Three dozen charges for No. 2 babcock	15.25	15.25

Steam Engine Maintainance and Repairs.

New smoke tubes in Silsby engine	157.30	
Repairing tubes in Silsby engine	6.00	
One pound of asbestos packing	1.00	
One grate Amoskeag engine	10.12	
Repairing pipe brace, bending angle iron & bolts	1.25	
Two trace chains	1.00	
Eight floor plates for engine wheels	2.40	
Five pounds of graphite	.90	
One coke hod for heater	3.00	
Stove pipe for heater	6.01	
Two pipe holders, heater to engines	4.75	
Twenty five pounds of wiping waste	3.50	
Repairs to heater boiler, and length of pipe and, elbow heater connections & 5 stop cocks	18.77	216.00

Fire Alarm System.

Removing bell from Chemical house	15.00	
Linemen, repairing line	20.00	
Two fire alarm boxes	255.67	
Paint for fire alarm boxes	2.20	
Three D. P. switches	1.20	
820 lbs. of Sulphate of Copper	45.10	
Two dozen zincs for open circuit batterys	5.32	
Balance on freight bill closed circuit battery	4.70	349.19

House Expenses.

20 ton of coal, at 7.00	140.00	
100 16 C P electric lamps & 30 Mazda lamps	30.50	
5 floor brushes	15.00	
9 stable brooms	6.38	
One case gold dust	4.75	
One box, 100 bars soap	5.90	
One case of Dutch cleanser	3.85	
One dozen bon ami	1.00	
Electric cord, sockets, switches & lamp guards	18.72	
50 ft. of 3-4 inch & 6 ft. 1-2 inch hose	10.20	
Door bolts and screws	1.60	
Two night latches, and one door knob	3.35	
Pipe and fittings, hot water Hdqrs, upstairs	6.51	
14 files and 12 hack saw blades	2.00	
5 gals. floor oil and 1 gal. floor paint	5.50	
3 cans stove enamel & 1 can aluminum paint	2.65	

Rail fittings, and pipe and rubber connect toilet	1.50	
One stop cock and two 3-4 inch hose nipples	1.40	
Six mouse and rat traps	1.00	
One gallon denatured alcohol	1.00	
Four galvanized blocks	1.20	265.01
Total		25945.91

Expenses of Department—Public Property Committee.

Hose Co. No. One building		
Grate, fire pot, lining top & water coil, for stove	15.56	
Repairs to sewer, 11 joints of sewer pipe, 2 sacks cement, one elbow, and one reducer	6.60	
New water conductor pipe from roof to sewer, including roof funnels and tubes	13.91	
Repairing of roof lumber	27.02	
Asphalt roofing	48.00	
Carpenter work, (labor)	18.00	
Nails, and cement coater	3.35	
Repairing floor in front of wagon, lumber	11.90	
Nails, oil and tar	1.20	
Repairing three chimneys	15.05	
Glass for door	.85	
One sprinkler head	1.75	163.19
Headquarters building—		
Ground rent	60.00	
Lumber for partition	4.40	
Repairing three chimneys	21.15	
One heating stove with pipe and board	18.65	
One Grate, cover, and fire pot, for stove	3.90	
Six pair hinges, 2 locks & 2 catches, for lockers	3.40	
Two push plates	1.00	
Repairing two doors, and glass for doors	2.15	
Two gallon of floor finish	7.00	
One can floor filler and brush	1.00	
One sheet of zinc for toilet	.35	
One sheet galv. iron, for chimneys, etc	.90	
Three joints stove pipe and one elbow	1.10	
One sprinkler head	1.75	
Two 1-2 inch water valves	1.90	
Eye bolts, links, and snaps	.70	
One ventilator pipe and roof flange	4.24	
One sack cement	.75	134.34
Hose Co. No. 3 building:		
Wire cleats, knobs, etc., for rewiring building	14.55	
Lumber for stall	.95	
Two stove boards	2.50	
Fire pot, grates, water coil & lining for stove	11.12	
Glass for door	1.25	31.62
Hose Co. No. 4 building—		
Repairing door	1.25	
One 3-4 inch water stop cock	1.33	2.58
Total		331.73

Expended by Committee on Ways and Means.

Printing report and advertising for bids, feed, etc		20.00
Recapitulation—		
Expended under Committee on fire and water	25945.91	
Expended under Committee on public property	331.73	
Expended under Committee on ways and means	20.00	26297.64

Less amounts received, sale of horse 75.00, wagon gear, 130.00. Sacks, old brass and copper 20.35. One horse turned over to street dep't, 150.00	375.35
Making the actual net expense of the department	25922.29

INVENTORY.

Supplies on hand January 1st. 1913.

12 ton of Hay, at 19.75	237.00	
8 1-2 ton Oats, at 28.50	242.25	
12 ton of Straw, at 8.90	106.80	
1500 lbs. of Bran, at 23.50	17.62	
400 lbs. of oil meal, at 30.00	6.00	
5 ton of coke, at 8.30	41.50	
25 ton coal, at 7.00	175.00	
400 lbs. of Bicarbonate of soda	14.00	
100 lbs. of Sulphuric acid	4.00	
8 boxes of chemical extinguisher charges	22.00	
2 sacks of salt	2.00	
6 bars of castile soap	4.50	
Common and hand soap, 90 bars	5.00	
20 packages gold dust	5.00	
110 electric lamps	24.05	
12 brooms	8.00	
2 floor brushes	6.00	
4 cans metal polish	5.00	
Horse medicine	6.00	
50 gallons Kerosene	4.75	
23 gallons gasoline	3.50	
Chloride of lime, lye, bon ami & gresolvent	4.00	
Dutch cleanser	3.50	
Sulphate of copper, zincs and coppers	60.00	
Lantern & lamp chimneys, burners & discs	5.00	
Snaps, bits, hose patches, and hydrant wrenches	20.00	
Wire, knobs, brackets and insulators	20.00	
Fuse plugs, dusters and old bunting	5.00	
One large and two small scales	35.00	
7 chamois skins and 4 sponges	14.00	
4 cylinders for marine light	10.00	
Old couplins, (old brass)	5.00	
Paint and enamel	5.00	
20 gals of auto, cylinder and engine oil	15.00	1141.47

Hose.

We have in service 8400 feet of 2 1-2 inch hose, 400 feet, of 1 1-2 inch, and 600 feet of chemical hose. Of the 2 1-2 inch hose 6550 feet is cotton rubber lined and 1850 feet is rubber hose. 6000 feet of this is in good condition and 2400 in fair condition, of the 1 1-2 inch it is in good condition, 400 feet of the chemical hose in first class and 200 feet in fair condition.

The hose is distributed as follows:

Headquarters, 2600 feet of 2 1-2, 400 ft. chemical hose.

Hose 3, 800 feet of 2 1-2, 200 ft. chemical hose.

Hose 1, 1600 feet of 2 1-2, 150 ft. 1 1-2 inch hose.

Hose 4, 2200 feet of 2 1-2, 250 ft. 1 1-2 inch hose.

McGregors, 600 feet of 2 1-2,

Alderbrook, 600 feet of 2 1-2.

APPARATUS OF THE DEPARTMENT.

At Headquarters.

One second size Amoskeag steam engine.
One third class Silsby steam engine.
One auto comb hose and chemical wagon with 2 35 gal. chemical tanks.
One double 60 gallon tank chemical wagon.
One 55 foot Hayes extension ladder truck.
Two hose reels, and one supply wagon.
Auto is equipped with 36 feet of ladders, deluge set 5 inch hydrant gate Y, nozzles, door opener, bars, exes, life lines, pyrene extinguisher, marine light, and two 3 gallon extinguishers.
The Chemical wagon has 36 feet of ladders and one 3 gal. extinguisher.
The truck carries a full hook and ladder equipment.

Hose One.

One two horse hitch hose wagon with 36 feet of ladders, two 6 gallon extinguishers, one pyrene extinguisher, one 5 inch hydrant gate Y, nozzles axes, bar, life lines, etc.
One two wheel hose reel, with nozzels and spanners.
The new auto combination wagon will be stationed here next month.

Hose Three.

One automobile combination hose and chemical wagon, 36 feet of ladders, with one 60 gallon chemical tank, two 3 gallon extinguishers, one 5 inch hydrant gate Y, nozzles, axes, bar, one pyrene extinguisher.

Hose Four.

One two horse hitch hose wagon, with 36 feet of ladders, two 6 gallon extinguishers, one pyrene extinguisher, one 5 inch hydrant gate Y, nozzles, axes, etc.
One two wheel hose reel, nozzles, axe, and bar.

McGregor Station.

One two wheel hose reel, nozzle and spanners.

Alderbrook Stations.

One four wheel hose carriage, with 30 feet of ladders, nozzle and axe.

Horses.

We have seven head of horses.

Buildings.

The buildings of the department are in good shape, but hose company No. 3 house will need to be painted this year, the rear end of the roof of hose one was repaired this winter, the roof and ceiling having rotted out, most of the work was done by the members of the department, the apparatus room at hose company No. 3 was rebuilt last fall by the members of the department without any expense to the city, a new sewer was laid at hose one house by the department without expense, except for material.

Fire Alarm System.

The fire alarm system consists of ten miles of No. 12 iron weatherproof wire placed on the poles of the Pacific Tel. and Tel. Company's poles, nineteen fire alarm boxes belonging to the City ond one to the Union Fishermen's Cannery. Four of these boxes are of an obsolete type and are not reliable and should be replaced soon. There are combination gongs and indicators in each of the regular houses, also unhitchers, and lighters. At headquarters there is also one transmission box for transmitting alarms received on the telephone out to the other companys. All telephone calls being sent to headquarters, and from there transmitted out to the other companies, we have three large alarm bells, one stationed at hose 3 house and one at hose 4 house, the one formerly at the chemical house on tenth street is at headquarters but not in place yet as the tower for same has not been

built yet but we expect to have it built this coming spring, the battery used on the fire alarm system is of the gravity cell type, this is almost an absolete type in fire alarm systems and should be replaced with one of the storage battery type.

Engines.

New smoke tubes were placed in the boiler of the Silsby engine last year and it is now in good shape, the boiler of the Amoskeag engine is getting badly pitted and will soon have to be replaced with a new one. A combination two engine heater was purchased last year and we are now able to keep both engines warm all the time, so as to be ready in case of need. The maintainence expense of this part of the department outside of the new heater and new tubes (which cost 427.00) was for the year but 160.00 or a little over 12.00 per month.

Valuation of Apparatus, etc.

Auto Combination wagons	15000.00	
Steam engines	4000.00	
Hook and ladder truck	1900.00	
Chemical wagon	1400.00	
Hose wagons	400.00	
Hose carts, and carriage	700.00	
Horses	1200.00	
Hose	4000.00	
Harness	200.00	
Hand extinguishers	300.00	
Nozzles, gates, Ys, deluge set, etc.	1000.00	
Fire alarm system	3000.00	
Feed and stores	1141.00	34241.00
Value of fire department buildings,		25000.00
Total		59241.00

We have now had one year of actual service with our first automobile wagon and six months with our second one, and they have proved successful without any doubt, and that they are far ahead of the horse drawn apparatus was shown on several occasions during the year. I cite one case in particular to prove this. On July 15th the roof of a house on Cedar street near 47th, caught on fire, the alarm was sent in from box 12, which is located at 48th street, both automobiles were there and had chemical streams on the fire before a hydrant stream was laid from the hydrant at the corner of 47th. street by men of the neighborhood using the hose carriage located at 48th street by the time that hose drawn apparatus could have reached the fire it would have been too large for the chemical streams and the house and the house next to it would have burned to the ground, as the water from the hydrant stream would not reach the roof of the house. The actual expense of maintainence of the automobile at hose 2, for the year was as follows: 110 gallons of gasoline 17.88, nine gallons of oil 6.75, recharging batteries 10.00, repairs 12.25, a total for the year of 46.88. The shoeing of a team of horses alone would cost that much. I would recommend that an auto be bought this year for hose 4, and that a chassis be bought and the chemical tanks from the old chemical wagon be placed on it, a short wheel base could be used and it used as a tractor for the truck, we could then do away with all the horses, and the department could be run with better efficiency for at least 2000.00 less than with horses. I would suggest that when apparatus of this nature is purchased that it be by issuing bonds for that purpose, say to run from one to twenty years, then each year the interest on the outstanding bonds and 1-20th of the original amount could be paid from the appropriation of the department then the present tax payer would pay his share of the burden and the future tax payer would pay his. As machines of this kind will surely last for 20 years $8700.00 was expended last

year for apparatus and if this method was used the cost of maintaining the department would have been 8000.00 less than it was, and that would be quite an item, it seems to me.

The matter of creating an electric department with the chief of the fire department as chief of electricity is again recommended. Also that a fire escape ordinance and an ordinance giving the chief of the fire department authority to order all rubbish removed from buildings be passed.

Again I wish to call attention to the fact that the east and the west ends of the City have very poor water service from a fire standpoint, and I hope the Council will take up the matter with the water commission so that something will be done in the matter. They have an excellent service now on the hill and if the two ends are attended to we will have a good water service all over the City.

Although the expense of the department is large this year I can safely say that not one cent has been squandered, and I recommend that this report be published in the official paper so that the tax payer can see what the money was expended for.

In conclusion I desire to thank his Honor, the Mayor, your Honorable board, the City Council, City Auditor, and the Press of the City, for the very courteous treatment extended to me during the year, to the employes of the Pacific Tel. and Tel. Co., for the prompt service rendered the department in notifying us of fires. And to the members of the department for the faithful manner in which they performed their duty.

Very respectfully submitted,

C. E. FOSTER.

Chief Engineer Fire Department.

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